

# Notice of Allowability

Application No.

09/180,269

Examiner

Joseph F Murphy

Applicant(s)

BALL ET AL.

Art Unit

1646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 8/6/2004.
2. ☒ The allowed claim(s) is/are 2-12, 17, 44-47, 51-60 renumbered as 1-11, 12, 13-16, 17-26.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Cynthia L. Kanik on 9/9/2004.

***In the claims:***

2. (Currently Amended) A method for identifying a compound which modulates binding between p21 and cyclin D1, the method including:

(a) bringing into contact a first substance comprising a peptide fragment of 40 amino acids or less of p21, the peptide fragment comprising an amino acid sequence selected from the group consisting of:

KACRRLFGPVDSEQLSRDCD (peptide 2) (SEQ ID NO:2);

KRRQTSMTDFYHSKRRLIFS (peptide 10) (SEQ ID NO:10), wherein the amino acid D may be replaced by any amino acid;

KRRQTSATDFYHSKRRLIFS (SEQ ID NO:28);

TSMTDFYHSKRRLIFSKRKP (peptide 11) (SEQ ID NO:11); and

KRRLIFSK (SEQ ID NO:23), wherein K, R, I or S may be replaced by any amino acid; with a second substance comprising cyclin D1 or a fragment thereof, and a test compound, under conditions wherein, in the absence of the test compound being an inhibitor of [interaction or] binding of said first and second substances, said first substance and said second substance bind; and

(b) determining binding between said first substance and said second substance.

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44. (Currently Amended) A method for identifying a compound which modulates binding between p21 and Cdk4, the method including:

(a) bringing into contact a first substance which comprises a peptide fragment of 40 amino acids or less of p21, the peptide fragment comprising an amino acid sequence selected from the group consisting of:

RERWNFDFVTETPLEGDFAW (peptide 4) (SEQ ID NO:4);

KRRQTSMTDFYHSKRRLIFS (peptide 10) (SEQ ID NO:10), wherein D may be replaced by any amino acid;

KRRQTSATDFYHSKRRLIFS (SEQ ID NO:28);

TSMTDFYHSKRRLIFSKRKP (peptide 11) (SEQ ID NO:11); and

KRRLIFSK (SEQ ID NO:23), wherein K, R, I or S may be replaced by any amino acid, with a second substance comprising Cdk4 or a fragment thereof, and a test compound, under conditions wherein, in the absence of the test compound being an inhibitor of binding of said first and second substances, said first substance and said second substance [or] bind; and

(b) determining binding between said first substance and said second substance.

58. (Currently Amended) A method for identifying a compound which modulates [interaction or] binding between p21 and Cdk4, the method including:

(a) bringing into contact a peptide fragment of 40 amino acids or less of p21, the peptide fragment comprising an amino acid sequence selected from the group consisting of:

RERWNFDFVTETPLEGDFAW (peptide 4) (SEQ ID NO:4);

KRRQTSMTDFYHSKRRLIFS (peptide 10) (SEQ ID NO:10), wherein D may be replaced by any amino acid;

KRRQTSATDFYHSKRRLIFS (SEQ ID NO:28);

TSMTDFYHSKRRLIFSKRKP (peptide 11) (SEQ ID NO:11); and

KRRLIFSK (SEQ ID NO:23), wherein K, R, I or S may be replaced by any amino acid, with Cdk4 and a test compound under conditions wherein in the absence of the test compound said fragment and Cdk4 bind; and

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(b) determining binding between said peptide fragment or derivative and Cdk4 in the presence of said test compound.

***Advisory Information***

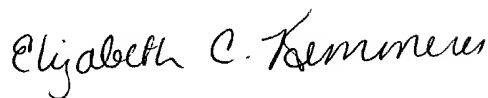
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Murphy whose telephone number is (571) 272-0877. The examiner can normally be reached Monday through Friday from 7:30 am to 5:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback can be reached on (571) 272-0961.

The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph F. Murphy, Ph. D.  
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Art Unit 1646  
September 13, 2004



ELIZABETH KEMMERER  
PRIMARY EXAMINER